

TWO NEW SPECIES OF *VERBESINA* (ASTERACEAE, HELIANTHEAE)  
FROM MÉXICO

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ABSTRACT

Two new species of *Verbesina* from México are described: *V. paneroi* *sp. nov.* from Volcán Colima, Jalisco, and *V. villasenorii* from western Oaxaca. The former is seemingly related to *V. klattii* B.L. Robins. & Greenm. and *V. furfuracea* McVaugh, the latter to *V. grayi* (Schultz-Bip.) Hemsl. An illustration is provided for *V. paneroi*.

KEY WORDS: *Verbesina*, Asteraceae, Heliantheae, México, systematics.

Routine identification of Mexican Asteraceae has revealed the following novelties in *Verbesina*. These were sent to me by Dr. José L. Panero, who asked that I note here that the collections were assembled through support of N.S.F. grant BSR 8806513 to Dr. Ed Schilling of the University of Tennessee.

*Verbesina paneroi* B. Turner, *sp. nov.* Figure 1. TYPE: MÉXICO. Jalisco: 20-25 km from El Fresnito along the road to the summit of Volcán Colima, 2300-2500 m, 27 Dec 1989, José L. Panero, José L. Villaseñor & A. Ramos 1841 (HOLOTYPE: TEX!; Isotypes: MEXU, TENN).

*Verbesina klattii* B.L. Robins. & Greenm. *similis sed capitulis 18 vel plus in panicula laxa ac corymboidea dispositis et involucri bracteis ovatilanceolatis adpressis valde imbricatisque (vs. late foliaceisac incohaerentibus) differt.*

Open shrubs 3-4 m high. Stems markedly winged, hispidulo-puberulous. Leaves opposite throughout, the larger up to 35 cm long and 25 cm wide, broadly ovate in outline, markedly trilobate, the major lobes with broad shallow lobes; petioles ca. 10 cm long, broadly winged throughout; blades evenly hispid above and below, with erect or ascending hairs. Heads ca. 18, radiate,



Fig 1 *Verbesina panerai*.  
from holotype

arranged in a broad, open, relatively naked corymbose panicle ca. 18 cm high and 20 cm wide, the ultimate peduncles unwinged, mostly 1-5 cm long. Involucres campanulate, 12-14 mm high, ca. 20 mm wide (pressed), ca. 4 seriate, the bracts mostly ovate lanceolate, appressed, moderately appressed pubescent, grading into the linear lanceolate pales, the latter shorter than the subtending florets. Ray florets 13-18, pistillate, fertile, the ligules golden yellow, 10-14 mm long, ca. 4 mm wide, the tube pubescent. Disc florets numerous, the corollas golden yellow, 7-9 mm long, pubescent throughout, the tubes and lobes especially so, the latter ca. 1.5 mm long. Achenes (somewhat immature) ca. 6 mm long, 3 mm wide, winged along the upper shoulders, glabrous or nearly so, the pappus of 2 persistent, sparsely ciliate awns 4-5 mm long.

*Verbesina paneroi* appears related to *V. furfuracea* McVaugh (sect. *Pseudomontanoa* [Turner 1985]), a species with alternate, nondecurent leaves, but it appears equally close to *V. klattii* (sect. *Pterodophyta* [Robinson & Greenman 1899]) having the capitulescence and heads of the former and the opposite, markedly decurrent leaves of the latter.

It is a pleasure to name this striking species for its principal collector, Dr. José Panero, currently working out of the University of Tennessee, an expert on the difficult genus *Viguiera* and related groups.

*Verbesina villasenorii* B. Turner, *sp. nov.* TYPE: MÉXICO. Oaxaca: 31 km S of Tlaxiaco on road to San Miguel Yosondua; occasional in cool pine-oak and *Cornus* forest, 2500 m, 19 Dec 1989, José L. Panero, José L. Villaseñor & A. Ramos 1809 (HOLOTYPE: TEX!; Isotypes: MEXU, TENN).

*Verbesina grayi* (Schultz-Bip.) Hemsl. similis sed foliis alternis in caulibus superis (vs. omnino oppositis) crassioribus brevioribusque et capituliis paucioribus in pedunculis ultimis longioribus (2-9 cm longis vs. 0.5-2.0 cm longis) differt.

Profusely branched shrub to 1 m high; stems unwinged, densely strigose. Leaves alternate above or nearly opposite throughout, those at midstem 4-6 cm long, 1.3-2.0 cm wide; petioles 2-5 mm long; blades ovate to elliptical, pinnately veined, densely and softly sericeous beneath, the surface atomiferous glandular, the margins serrulate to nearly entire; heads eradiate, 5-8 per main stem, the ultimate peduncles 2-9 cm long; involucres campanulate, 6-8 mm high, 9-11 mm wide, the bracts 3-4 seriate, sericeous, subequal, the outer series oblanceolate to somewhat spatulate, grading into the pales, the latter with erect yellow acute glabrous apices. Florets numerous (60+), the corollas ca. 4 mm long, pubescent throughout with sericeous hairs, the tube ca. 1.5 mm long; achenes (immature) ca. 3 mm long, sparsely pubescent, the pappus of 2 readily deciduous, nearly eciliate awns ca. 2.5 mm long.

*Verbesina villasenorii* superficially resembles *V. grayi*, especially those populational forms of the latter from the states of México and Michoacán with eradiate heads. Rzedowski (1980) applied the name *V. discoidea* (Brandegge) Rzed. to the latter populations, but I treat these (Turner, in prep.) as part of the earlier, widespread, highly variable *V. grayi* (including *V. heterocarpa* S.F. Blake). McVaugh (1984) maintained both *V. discoidea* and *V. heterocarpa* but failed to account for *V. grayi*; Rzedowski (1980) treated *V. heterocarpa* as synonymous with *V. discoidea*, but did not note their close relationship with *V. grayi*.

It is a pleasure to name the present novelty for José Villaseñor, one of the most promising synantherologists of México, currently working for his doctorate degree at Pomona, California.

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#### LITERATURE CITED

- McVaugh, R. 1984. *Verbesina*, in *Flora Novo-Galiciana* 12:963-1013. University of Michigan Press, Ann Arbor.
- Robinson, B.L. & J. Greenman. 1899. Synopsis of the genus *Verbesina*, with an analytical key to the species. *Proc. Amer. Acad. Arts* 39:534-566.
- Rzedowski, J. 1980. Dos especies mexicanas de *Verbesina* (Compositae): Una nueva y una redefinida. *Bol. Soc. Argentina Bot.* 19:53-60.
- Turner, B.L. 1985. Revision of *Verbesina* sect. *Pseudomontanoa* (Asteraceae). *Pl. Syst. Evol.* 150:237-262.